

■ **Application and admission**

Applicants who fulfil one of the following requirements qualify for the Course:

- a master degree from a technical university in a related field
- a bachelor degree from a technical university in a related field and a minimum of 3 years of professional experience
- a degree from a technical college and minimum 5 years of professional experience

A good command of English language is obligatory.

Applicants have to send in the completed registration form, a CV and copies of degrees.

Admission is based on the review of the applications and if required on interviews with the candidates or a test.

■ **Number of participants**

Maximum 30 students per course
Deadline: June 30th, 2009

■ **Title**

Successful participants are awarded the title "Academic NATM engineer" ("Master of Engineering" in preparation)

■ **Attendance fee**

12.000 Euro

■ **Organization & Accommodation**

The University course will take place in Graz and Leoben. Both cities are university cities with a large number of students and a vital everyday life. Graz has got an international airport and a train station. Leoben can be easily reached by train in one hour from Graz.

For students from abroad, we can assist in finding the adequate accommodation. There are a number of dormitories and guesthouses in Graz and Leoben, where one can stay for a longer period at a reasonable price. If you need any assistance or have additional questions, do not hesitate to contact :

Prof. Wulf Schubert, TU Graz
E-Mail: NATM@tugraz.at
Tel.: +43 316 873-8114
Fax: +43 316 873-8618

Prof. Robert Galler, MU Leoben
E-Mail: robert.galler@mu-leoben.at
Tel.: +43 3842 402-3400
Fax: +43 3842 402-6602

Application forms and detailed information:
www.natm.at

UNIVERSITY CERTIFICATE PROGRAMME NATM Engineer

Jointly organized by
Graz University of Technology
and
University of Leoben

Start: September 14th, 2009

■ Aim of the Course

The continuously increasing worldwide demand for qualified tunnel engineers cannot be covered by the standard education at universities.

The University course aims at increasing the skills of the participants in the fields of geotechnical engineering and tunnelling, with an emphasis on the "New Austrian Tunnelling Method" (NATM).

The degree holders shall be enabled to accomplish tunnelling projects on their own in the face of geotechnical, structural, organizational, contractual and economic needs according to the latest state of the art.

■ Participants

The Course addresses civil engineers, geotechnical engineers and engineering geologists who do have a distinctive technical education and aim at a specialization in tunnelling.

Future fields of work may be planning, design and consulting of underground projects for engineering offices, or construction management for contractors and owners.

■ Courses

- Introduction to the "New Austrian Tunnelling Method"
- Investigation and Engineering Geological methods
- Laboratory methods
- Characterization and Classification
- Geotechnical design
- Analysis
- Tunnel Layout

- Site organization, construction management
- Construction contract
- Risk analysis
- Tunnel safety
- Monitoring, data evaluation and interpretation
- Instrumentation

Preparation of a thesis is mandatory. A final exam concludes the course.

■ Lecturers

The majority of the lectures will be held by the professors Galler, Schubert, Kieffer and Schweiger. In addition lecturers with academic background and from industry will contribute to special issues.

Teaching Method and Language:

The teaching method is teacher-centred to mediate the necessary skills. Practical training on construction sites will round off the course. Participants are encouraged to develop and realize projects in team work.

All courses will be taught in English.

■ Duration and Organization

The University Course lasts 4 semesters and is valid 61 ECTS-Credits.

The course will be held in 4 modules lasting three weeks each, allowing participation parallel to the job.

Courses start every second year.

Start of the course: Sept. 14th, 2009

Schedule:

Module 1:

Sept. 14th, 2009 to Oct. 2nd, 2009

held in Graz

Module 2:

April 6th, 2010 to April 23rd, 2010

held in Leoben

Module 3:

Sept. 13th, 2010 to Oct. 1st, 2010

held in Graz

Module 4:

April 26th, 2011 to May 14th, 2011

held in Leoben

